WHAT IS CLAIMED IS:

1. A method for converting a real signal into a complex signal inherently in quadrature, comprising the step of:

adding to a real signal designed to be converted into a complex signal a signal whose frequency is four times the band-center frequency of said signal to be converted, in order to obtain an inherent quadrature.

2. The method according to claim 1, further comprising the steps of:

after said adding step from which a sum signal is obtained, selecting, from said sum signal, a first component and a second component which are in phase and in quadrature;

removing components below a given level from said first and second components in phase and in quadrature, in order to obtain a first and a second signal component at DC zero level;

multiplying said DC zero level components respectively by 1 and -1, with a frequency equal to the center frequency of said signal to be converted in input.

3. The method according to claim 2, wherein said selection step is performed by selection means, which send signals to said threshold circuits with a frequency which is twice said band-center frequency of the signal to be converted.

4. The method according to claim 3, wherein said selection means comprise at least one selector and oscillator means adapted to generate a square-wave signal whose frequency is equal to twice the band-center frequency of said signal to be converted.

5. The method according to claim 4, wherein the square-wave signal generated by said oscillator means included in said selection means is only approximately in phase with said signal whose frequency is four times said center frequency of the signal to be converted.

6. The method according to claim 5, wherein multiplier means are suitable to multiply said phase and quadrature components by a square-

wave signal whose frequency is equal to said center frequency of the signal to be converted.

7. The method according to claim 6, wherein said square-wave signal generated by said oscillator means is sent to said multiplier means and is only approximately in phase with said signal whose frequency is four times said center frequency of the signal to be converted.

8. The method according to claim 3, wherein said selection means comprise two adders adapted to add said sum signal to square-wave signals which are respectively normal and inverted.

9. The method according to claim 8, wherein said selection means further comprise an additional pair of selectors adapted to add a DC offset to said signals in output from said pair of adders whereto said oscillator sends said square-wave signal whose frequency is twice said center frequency.

10. A device for converting a real signal into a complex signal, comprising first adder means adapted to add a signal to be converted and a signal whose frequency is four times the center frequency of said signal to be converted.

11. The device according to claim 10, further comprising:

selection means adapted to select in-phase and quadrature components obtained from a sum signal which is provided in output by said first adder means;

threshold means adapted to remove components below a given threshold from said in-phase and quadrature components; and

multiplier means adapted to multiply by +1 and -1 output signals from said threshold means.

12. The device according to claim 11, comprising oscillator means adapted to generate said signal whose frequency is four times said central frequency.

13. The device according to claim 11, comprising additional oscillator means adapted to generate a square-wave signal whose frequency is twice

the frequency of said center frequency, said additional oscillator means sending said square-wave signal to selection means which receive said sum signal from said first adder means.

14. The device according to claim 12, comprising oscillator means adapted to generate a square-wave signal whose frequency is equal to said center frequency of said signal to be converted, said square-wave signal being sent into said multiplier means for multiplication with said in-phase and quadrature components.

15. The device according to claim 11, wherein said selection means comprise a first pair of adders adapted to add to said sum signal a normal and inverted signal whose frequency is respectively twice said center frequency of said signal to be converted.

16. The device according to claim 15, wherein said selection means comprise a second pair of adders adapted to add a DC offset to the signals in output from said first pair of adders.